Amendments to the claims

1-20 (cancelled)

21. (new)

A potable water circulation system for circulating water in a municipal water distribution network comprising, a branch pipe having a source end, a plurality of extremities therein at distances from said source end, and segment valves therein between said source end and said extremities; said potable water circulation system comprising;

pump means having a nominal capacity;

an auxiliary pipe extending along and outside said branch pipe and being connected to said pump means, to said extremities and to said source end; said auxiliary pipe being connected to said pump means for circulation of water therein from said source end toward said extremities, and for causing a flow of water inside said branch pipe from said extremities, through said segment valves, and toward said source end.

22. (new)

The potable water circulation system as claimed in **claim 21**, wherein said branch pipe has a high water demand and a low water demand, and said nominal capacity of said pump means corresponds to said low water demand.

23. (new)

The potable water circulation system as claimed in **claim 21**, wherein said auxiliary pipe is smaller in size than said branch pipe.

24. (new)

The potable water circulation system as claimed in **claim 21**, wherein said extremities comprise a fire hydrant or a dead end.

25. (new)

The potable water circulation system as claimed in **claim 21**, further comprising a plurality of flow control valves mounted in said auxiliary pipe for individually selectively controlling a flow of water from said source end and into each of said extremities.

26. (new)

The potable water circulation system as claimed in **claim 25**, wherein at least one of said flow control valves is located near one of said segment valves.

27. (new)

The potable water circulation system as claimed in **claim 22** comprising means to cause a minimal circulation of water in said branch pipe when a demand in said branch pipe corresponds to said low water demand, and means to reverse said circulation when said demand in said branch pipe corresponds to said high water demand.

28. (new)

The potable water circulation system as claimed in **claim 22**, further comprising a water treatment system connected to said auxiliary pipe for upgrading a quality of water inside said auxiliary pipe.

29. (new)

The potable water circulation system as claimed in **claim 22**, further comprising isolating valves between said branch pipe and said auxiliary pipe for selectively isolating said auxiliary pipe from said branch pipe.

30. (new)

The potable water circulation system as claimed in **claim 28**, wherein said branch pipe belongs to a water distribution system of a residential subdivision, and said low water demand is slightly more than a normal demand of water by consumers in said subdivision.